shire, and that the direction of the wind over these counties during the time was chiefly N. and E.N.E. At many places the day was fine and bright.

"The change of wind from S. nearly to S.E. by midnight on the 14th, and to N.E. at about the time the fall began, and the change of wind just before the rain ceased to N.N.W., indicate that this great fall of rain in so short a time was attributable to the meeting of two currents of air of different temperatures, and the consequent great deposition of moisture.

"It will be seen that the weather in Ireland on this day was for the most part fine.

"I am, dear Sir,
"Yours very faithfully,
"JAMES GLAISHER."

"P.S. The average fall of rain in the month of March is about 1·7 inch."

"*S. H. Christie, Esq.,*
Sec. R. S."

April 3, 1851.

LIEUT.-COLONEL SABINE, R.A., V.P. & Treas. in the Chair.

A paper was read, entitled "Observations upon *Appendicularia* and *Doliolum*." By Thomas H. Huxley, Esq. Communicated by E. Forbes, Esq., F.R.S. Received Feb. 26, 1851.

This is a description of two Ascidian genera which possess very considerable interest: *Doliolum*, as forming a link between the *Pyrosomata* and *Salpæ*; and *Appendicularia*, as representing in a permanent form the larval state of the Ascidians, long ago described by M. Milne-Edwards.

Appendicularia, which has been also imperfectly described under the names of *Oikopleura* and *Venillaria*, is in fact an ascidian provided with a long vibratile fin or tail, by the aid of which it swims freely about.

That it is an adult form is shown by the existence of a well-developed testis, but the author leaves undecided the nature of the female organs.

On the other hand it seems doubtful whether *Doliolum* is truly an independent form, or whether it is not rather a detached "zoöid" of the genus *Auchenia*.

A paper was also in part read, entitled "Researches into the Molecular Constitution of the Organic Bases." Part II. By A. W. Hofmann, Ph.D. Communicated by Professor Graham, F.R.S. Received March 12, 1851.